

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 12/11/2024 Revision date: 12/11/2024 Supersedes version of: 15/11/2022

Version: 8.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form Mixture

Product name CFS-S SIL / CP 601S
Product code BU Fire Protection
Type of product Sealants



1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Hilti (Fastening Systems) Limited

Unit C4

North City Business Park, Finglas

IE 11 Dublin Irland

T +353 188 64101

1850-287 387 Call Save, F +353 183 03569

iesales@hilti.com

Department issuing data specification sheet

Hilti AG

Feldkircherstraße 100 FL 9494 Schaan Liechtenstein T +423 234 2111

product.compliance-fire.protection@hilti.com

1.4. Emergency telephone number

Emergency number Emergency CONTACT (24-Hour-Number):

GBK GmbH Global Regulatory Compliance

+49 (0)6132-84463

+353 188 64101 1850-287 387 Call Save

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	Beaumont Road 9	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available



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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

EUH-statements EUH210 - Safety data sheet available on request.

2.3. Other hazards

Other hazards which do not result in classification

Product hydrolyses under formation of methanol (CAS no. 67-56-1). Methanol is toxic by inhalation, in contact with skin and if swallowed. Methanol causes damage to organs. Methanol is highly flammable.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
diisobutoxy-bisethylacetoacetatotitanate (83877-91-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component	
	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
diisobutoxy-bisethylacetoacetatotitanate	CAS-No.: 83877-91-2 EC-No.: 281-161-6 REACH-no: 01-2119968551- 31	< 2	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336 STOT SE 3, H335

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation Get medical advice/attention if you feel unwell. Allow affected person to breathe fresh air.

Allow the victim to rest.

First-aid measures after skin contact Remove affected clothing and wash all exposed skin area with mild soap and water,

followed by warm water rinse. If skin irritation occurs: Get medical advice/attention.



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First-aid measures after eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persists.

First-aid measures after ingestion Drink plenty of water. Do NOT induce vomiting. Get immediate medical advice/attention.

Rinse mouth. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

Methanol (CAS 67-56-1) is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Methanol may cause irritation of the mucosa, as well as nausea, vomiting, headaches, vertigo and visual disorders, including blindness (irreversible damage to the optic nerve), acidosis, spasms, narcosis and coma. There may be a delay in the onset of these effects after exposure. Further toxicology information in section 11 must be observed.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Water spray. Carbon dioxide. dry chemical powder, alcohol-resistant foam, carbon dioxide

(CO2). Sand. Foam. Dry powder.

Unsuitable extinguishing media Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Reactivity in case of fire Formation of toxic gases is possible during heating or in case of fire. Decomposition

products may be a hazard to health.

Hazardous decomposition products in case of fire Carbon dioxide. Carbon monoxide.

5.3. Advice for firefighters

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting Self-contained breathing apparatus. Complete protective clothing. Do not enter fire area

without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment Wear recommended personal protective equipment.

Emergency procedures Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Do not

touch or walk on the spilled product. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment For further information refer to section 8: "Exposure controls/personal protection". Equip

cleanup crew with proper protection.

Emergency procedures Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment Absorb spilled material with sand or earth. Collect spillage.

Methods for cleaning up

Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.

Clean contaminated surfaces with an excess of water. On land, sweep or shovel into suitable containers. Minimise generation of dust. Store away from other materials.



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6.4. Reference to other sections

For further information refer to section 13. See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Wear personal protective equipment. Wash hands and other exposed areas with mild soap

and water before eating, drinking or smoking and when leaving work. Provide good

ventilation in process area to prevent formation of vapour.

Hygiene measures Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this

product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Keep cool. Store in a dry place. Keep only in the original container in a cool, well ventilated

place away from : Keep container closed when not in use.

Incompatible products Strong bases. Strong acids.
Incompatible materials Sources of ignition. Direct sunlight.

Storage temperature 5-25 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional information The product has a pasty consistency. Exposure limit values for respirable dusts are not

relevant for this product.

8.1.1. National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Protective clothing. Safety glasses. Gloves. Avoid all unnecessary exposure.

Personal protective equipment symbol(s):









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8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or safety glasses

Eye protection			
Туре	Field of application	Characteristics	Standard
Safety glasses			EN 166, EN 170

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves. ISO 374-1. The permeation time is not the maximum wearing time! Generally speaking, it must be reduced. Contact with either mixtures of substances or different substances may shorten the protective function's effective duration. Wear protective gloves.

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Butyl rubber	6 (> 480 minutes)	>0.3		EN ISO 374
	Nitrile rubber (NBR)	1 (> 10 minutes)	>0.4		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

No respiratory protection needed under normal use conditions. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Wear appropriate mask

Respiratory protection			
Device	Filter type	Condition	Standard
Full face mask	ABEK		EN 136

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke when using this product. Do not eat, drink or smoke during use.

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid

Colour Various colours.

Appearance Pasty.

Molecular mass Not determined

Odour slight.

Odour threshold Not determined Melting point Not available



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Freezing point Not available Boiling point Not available Flammability Not available Lower explosion limit Not available Upper explosion limit Not available Pasty; Not relevant Flash point > 400 °C (DIN 51794) Auto-ignition temperature Decomposition temperature > 300 °C (Lit) ≈ Not applicable рΗ

Viscosity, kinematic Not available

Viscosity, dynamic > 1000000 mPa·s (Brookfield)

Solubility insoluble in water.

Partition coefficient n-octanol/water (Log Kow) Not available

Vapour pressure Not available

Vapour pressure at 50°C Not available

Density 1.5 – 1.54 g/cm³ 23°C, 1013hPa (ISO 1183-1 A)

Relative density
Relative vapour density at 20°C
Particle characteristics
Not available
Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Explosion limits for released methanol 5.5 - 44%(V)

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions. Not established.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Reacts with: water, basic substances and acids . Reaction causes the formation of: methanol.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (inhalation)

Not classified

Not classified

Additional information Based on available data, the classification criteria are not met

LD50 oral rat > 2000 mg/kg



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diisobutoxy-bisethylacetoacetatotitanate	
LD50 oral rat	> 5000 mg/kg bodyweight (Rat, Oral)
Skin corrosion/irritation	Not classified (Based on available data, the classification criteria are not met) (Based or
	available data, the classification criteria are not met)
	pH: ≈ Not applicable
Additional information	Result/Effect: no irritating
	Species/Test system: rabbit
	Source: conclusion by analogy
	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Not classified (Based on available data, the classification criteria are not met). (Based or
	available data, the classification criteria are not met)
	pH: ≈ Not applicable
Additional information	Result/Effect: not irritating
	Species/Test system: in vitro method; Bovine eye / bovine cornea
	Source: conclusion by analogy OECD 437
	Based on available data, the classification criteria are not met
Respiratory or skin sensitisation	Not classified (Based on available data, the classification criteria are not met) (Based on
	available data, the classification criteria are not met)
Additional information	Rout of exposure: dermal
	Result/Effect: not sensitizing
	Species/Test system: guinea-pig
	Source: conclusion by analogy
	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Not classified
Additional information	Based on available data, the classification criteria are not met
Carcinogenicity	Not classified
Additional information	Based on available data, the classification criteria are not met
Reproductive toxicity	Not classified
Additional information	Based on available data, the classification criteria are not met
STOT-single exposure	Not classified
Additional information	Based on available data, the classification criteria are not met
diisobutoxy-bisethylacetoacetatotitanat	e (83877-91-2)
STOT-single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.
STOT-repeated exposure	Not classified
Additional information	Based on available data, the classification criteria are not met

Not classified

Additional information

11.2. Information on other hazards11.2.1. Endocrine disrupting properties

11.2.2. Other information

Potential adverse human health effects and

symptoms

Other information

Aspiration hazard

Based on available data, the classification criteria are not met

Based on available data, the classification criteria are not met

Hydrolysis product / impurity: Methanol (CAS 67-56-1) is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Methanol may cause irritation of the mucosa, as well as nausea, vomiting, headaches, vertigo and visual disorders, including blindness (irreversible damage to the optic nerve), acidosis, spasms, narcosis and coma. There may be a delay in the onset of these effects after exposure.



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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general The product is not considered harmful to aquatic organisms nor to cause long-term adverse

effects in the environment.

Hazardous to the aquatic environment, short-term

acute)

Not classified

Hazardous to the aquatic environment, long-term

(chronic)

Not classified

diisobutoxy-bisethylacetoacetatotitanate (83877-91	-2)
	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Reaction product)

12.2. Persistence and degradability

CFS-S SIL / CP 601S	
g ,	Polymer component. biologically not degradable. Elimination by adsorption to activated sludge. The product of hydrolysis (methanol) is readily biodegradable.
diisobutoxy-bisethylacetoacetatotitanate (83877-91	-2)
Persistence and degradability	Biodegradability: not applicable.

12.3. Bioaccumulative potential

CFS-S SIL / CP 601S	
Bioaccumulative potential	Polymer component. No bioaccumulation expected.
diisobutoxy-bisethylacetoacetatotitanate (83877-91	-2)

12.4. Mobility in soil

diisobutoxy-bisethylacetoacetatotitanate (83877-91-2)	
Ecology - soil	No (test)data on mobility of the substance available.

12.5. Results of PBT and vPvB assessment

CFS-S SIL / CP 601S

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods Dispo

Product/Packaging disposal recommendations

Ecological information

European List of Waste (LoW, EC 2000/532)

Dispose of contents/container in accordance with licensed collector's sorting instructions.

Dispose in a safe manner in accordance with local/national regulations.

Avoid release to the environment.

08 04 10 - waste adhesives and sealants other than those mentioned in 08 04 09



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HP Code

HP7 - "Carcinogenic:" waste which induces cancer or increases its incidence

HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID /

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information availa	able		

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

Air transport

No data available

Rail transport

No data available

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List



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PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources REGULATION (EC) No 1272/2008 OF THE	EUROPEAN PARLIAMENT AND OF THE
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COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and

amending Regulation (EC) No 1907/2006.

Other information None.

Full text of H- and EUH-statements:	
EUH210	Safety data sheet available on request.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.